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DOCUMENT-IDENTIFIER: JP <u>2002337236</u> A TITLE: METHOD FOR WELDING RESIN MEMBER

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ABSTRACT:

PROBLEM TO BE SOLVED: To provide a method for welding a resin member by which a welding state between the resin members or the resin member and a non-resin member by laser emission can be grasped in a real-time mode during welding and controlled and an after inspection need not be conducted.

SOLUTION: When a laser beam transmitting member and a laser beam absorbing resin member are lapped together and a laser beam is emitted to a joint pat through the laser beam transmitting member and both members are welded to each other by melting the joint part, a rib is formed on either of parts which become the joint parts at least between both members and the height of both members where the rib is inserted is measured by pressurizing both members with a force which does not collapse the rib. Next the laser beam is made to penetrate the laser beam absorbing resin member by transmitting the laser beam through the rib from the laser beam transmitting member side and the rib is made to melt into the laser beam absorbing resin member by melting the joint part. In this case, the welding state is controlled based on a decrease of the height of the rib.

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